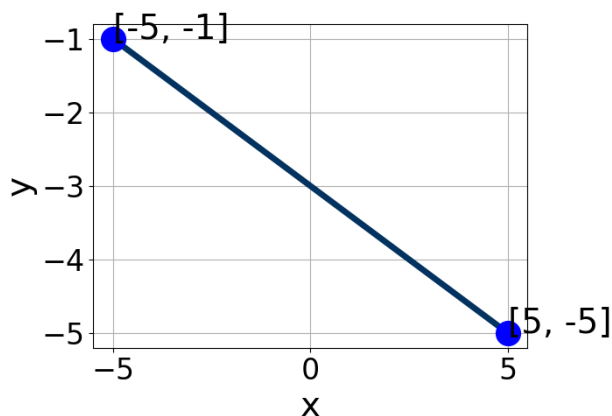


1. Write the equation of the line in the graph below in Standard Form  $Ax + By = C$ . Then, choose the intervals that contain  $A$ ,  $B$ , and  $C$ .



- A.  $A \in [-0.5, 0.5]$ ,  $B \in [-1.5, 0]$ , and  $C \in [1, 5]$   
 B.  $A \in [-4.2, -1.5]$ ,  $B \in [-6.6, -3.8]$ , and  $C \in [9, 19]$   
 C.  $A \in [-0.5, 0.5]$ ,  $B \in [0.2, 3.3]$ , and  $C \in [-6, -2]$   
 D.  $A \in [1.7, 2.2]$ ,  $B \in [-6.6, -3.8]$ , and  $C \in [9, 19]$   
 E.  $A \in [1.7, 2.2]$ ,  $B \in [3.5, 6.5]$ , and  $C \in [-21, -13]$

2. Find the equation of the line described below. Write the linear equation in the form  $y = mx + b$  and choose the intervals that contain  $m$  and  $b$ .

Perpendicular to  $5x - 7y = 11$  and passing through the point  $(3, -9)$ .

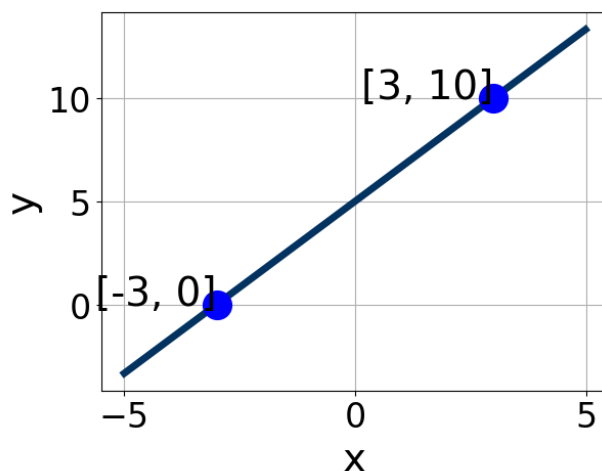
- A.  $m \in [-1.95, -0.92]$   $b \in [-12.7, -11.3]$   
 B.  $m \in [-1.95, -0.92]$   $b \in [-5.4, -2.3]$   
 C.  $m \in [1.19, 2.58]$   $b \in [-14.4, -13.1]$   
 D.  $m \in [-1.32, -0.04]$   $b \in [-5.4, -2.3]$   
 E.  $m \in [-1.95, -0.92]$   $b \in [4.3, 7.1]$

3. Solve the linear equation below. Then, choose the interval that contains the solution.

$$\frac{-6x + 6}{7} - \frac{-3x + 4}{4} = \frac{4x - 8}{5}$$

- A.  $x \in [-0.6, 1]$
- B.  $x \in [0.4, 1.9]$
- C.  $x \in [10.4, 12.3]$
- D.  $x \in [2.4, 4]$
- E. There are no real solutions.

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4. Write the equation of the line in the graph below in Standard Form  $Ax + By = C$ . Then, choose the intervals that contain  $A$ ,  $B$ , and  $C$ .



- A.  $A \in [-3, 0.3]$ ,  $B \in [-0.5, 2.4]$ , and  $C \in [0, 12]$
- B.  $A \in [-8.2, -1.7]$ ,  $B \in [2.9, 3.9]$ , and  $C \in [15, 26]$
- C.  $A \in [2.4, 5.7]$ ,  $B \in [-3.7, -2.4]$ , and  $C \in [-15, -13]$
- D.  $A \in [2.4, 5.7]$ ,  $B \in [2.9, 3.9]$ , and  $C \in [15, 26]$
- E.  $A \in [-3, 0.3]$ ,  $B \in [-2.2, -0.9]$ , and  $C \in [-8, -3]$

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5. Find the equation of the line described below. Write the linear equation in the form  $y = mx + b$  and choose the intervals that contain  $m$  and  $b$ .

Parallel to  $9x - 8y = 7$  and passing through the point  $(-3, -5)$ .

- A.  $m \in [1.01, 1.38]$   $b \in [1.53, 1.73]$

- B.  $m \in [1.01, 1.38]$   $b \in [-1.96, -1.53]$   
C.  $m \in [1.01, 1.38]$   $b \in [-2.13, -1.8]$   
D.  $m \in [-0.45, 1.02]$   $b \in [-1.96, -1.53]$   
E.  $m \in [-1.49, 0.54]$   $b \in [-8.58, -8.29]$
- 

6. Solve the linear equation below. Then, choose the interval that contains the solution.

$$\frac{-3x + 8}{3} - \frac{8x - 9}{7} = \frac{-3x - 9}{5}$$

- A.  $x \in [2.73, 5.73]$   
B.  $x \in [-1.28, 1.72]$   
C.  $x \in [1.06, 3.06]$   
D.  $x \in [15.85, 18.85]$   
E. There are no real solutions.
- 

7. First, find the equation of the line containing the two points below. Then, write the equation in the form  $y = mx + b$  and choose the intervals that contain  $m$  and  $b$ .

$$(-4, -3) \text{ and } (8, -9)$$

- A.  $m \in [-0.54, 0.07]$   $b \in [-8, -4]$   
B.  $m \in [0.44, 0.55]$   $b \in [-13, -12]$   
C.  $m \in [-0.54, 0.07]$   $b \in [-17, -15]$   
D.  $m \in [-0.54, 0.07]$   $b \in [5, 7]$   
E.  $m \in [-0.54, 0.07]$   $b \in [-3, 2]$
- 

8. Solve the equation below. Then, choose the interval that contains the solution.

$$-15(-3x + 5) = -17(-19x + 11)$$

- A.  $x \in [0.79, 1.37]$
  - B.  $x \in [0.05, 0.69]$
  - C.  $x \in [-1.11, -0.94]$
  - D.  $x \in [0.57, 0.93]$
  - E. There are no real solutions.
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9. First, find the equation of the line containing the two points below. Then, write the equation in the form  $y = mx + b$  and choose the intervals that contain  $m$  and  $b$ .

$$(-3, 9) \text{ and } (8, 2)$$

- A.  $m \in [-2.49, 0.19]$   $b \in [10.07, 12.91]$
  - B.  $m \in [0.47, 2.35]$   $b \in [-3.67, -2.56]$
  - C.  $m \in [-2.49, 0.19]$   $b \in [-6.04, -5.31]$
  - D.  $m \in [-2.49, 0.19]$   $b \in [-7.21, -6.31]$
  - E.  $m \in [-2.49, 0.19]$   $b \in [6.55, 7.96]$
- 

10. Solve the equation below. Then, choose the interval that contains the solution.

$$-15(13x + 14) = -12(-5x - 16)$$

- A.  $x \in [-0.25, -0.11]$
  - B.  $x \in [-0.12, -0.05]$
  - C.  $x \in [-1.67, -1.46]$
  - D.  $x \in [0.01, 0.09]$
  - E. There are no real solutions.
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